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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

CHANNAVAJJALA, S

ART UNIT

PAPER NUMBER

2777

DATE MAILED:

06/19/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/369,327**

Applicant(s)  
**Norihiro Iwata et al.,**

Examiner  
**Srirama Channavajjala**

Group Art Unit  
**2777**



☒ Responsive to communication(s) filed on Aug 6, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 36-48 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 36-48 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/918,106.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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### **DETAILED ACTION**

1. Claims 1-35 have been canceled; and Claims 36-48 are presented for examination;
2. The preliminary amendment [paper no. # 2] filed on 8/6/1999 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/918,106, filed on 8/27/97 is established. The parent Application No. 08/918,106, filed on 8/27/97 is now US Patent No. **5940289**.

#### ***Specification***

3. The title of the invention is not descriptive. A **new title** is required that is clearly indicative of the invention to which the claims are directed.

#### ***Drawings***

4. The Drawing filed on 8/6/1999, are objected to by the Draftsperson under 37CFR 1.84 or 1.152. [ see PTO-948, paper no. # 4].

#### ***Priority***

5. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 08/918,106, filed on 8/27/1997.

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*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371<sup>o</sup> of this title before the invention thereof by the applicant for patent.

7. Claims 36, 43-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Mattos et al., [hereafter Mattos], US Patent No. 5765147.

8. As to Claims 36, 43-44, Mattos details a system which including 'inputting a query' [fig 2, element 202, col 14, line 26-28, line 5-8] , ' a retrieval part retrieving a database based on a search condition and an operation part operating retrieved data' [col 2, line 46-58], more specifically search condition see example in col 4, line 23-34; examiner interpreting database to be equivalent to Mattos's fig 1, element 112, first server to be equivalent to Mattos's fig 1, element 102, and second server to be equivalent to fig 1, element 100, see col 2, line 14-29; 'retrieving said database based on said search condition and holding position information of said retrieved data' [col 9, line 14-22, col 14, line 5-12, col 14, line 40-44, fig 4, element 402, examiner interpreting position information to be equivalent to index name in a column and column is identified by schema name, table name etc., [see col 4, line 53-61, col 16, line 3-6, col 9, line 24-25], 'referencing said retrieved data used said position information from said database and operating said retrieved data' [col 4, line 53-61, col 14, line 33-44, col 16, line 7-14].

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9. As to Claims 37-38, Mattos details a system which including 'retrieved data is constituted by a plurality of partial data and each said partial data is defined by a name and data type declaration' [ col 6, line 54-67, col 7, line 1-4, col 8, line 41-53], examiner interpreting defining name to be equivalent to Mattos's user-defined function(s) or UDF, see col 3, line 22-29, and more specifically, name and data type declaration, see col 6, line 59-64, col 8, line 10-34, partial data to be equivalent to sub-queries, therefore, defining name and data type declarations are inherent aspect of Mattos teachings.

10. As to Claim 39, Mattos teaches a system which including 'partial data is stored as part of said retrieved data' [col 2, line 19-22, col 6, line 18-23, line 37-40, col 16, line 42-52].

11. As to Claim 40, Mattos teaches a system which including 'partial data of said retrieved data is replaced by another partial data' [col 15, line 12-54, col 17, line 4-9].

12. As to Claim 41, Mattos teaches a system which including 'operating said retrieved data, said partial data of said retrieved data is deleted from said retrieved data' [col 8, line 59-67, col 9, line 1-12].

13. As to Claim 42, Mattos teaches a system which including 'operating said retrieved data is defined by a member function which contains processing for said partial data' [col 9, line 65-67, col 10, line 1-11].

14. As to Claim 45, Mattos teaches a system which including 'first server retrieves partial data item of said data from the second server based on said position information' [col 9, line 13-25], examiner interpreting first server to be equivalent to Mattos's fig 1, element

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102, second server to be equivalent to Mattos's fig 1, element 100, partial data to be equivalent to sub-queries.

15. As to Claim 46, Mattos teaches a system which including 'first server performs a process using the retrieved partial data items' [col 11, line 30-67].

*Claim Rejections - 35 USC § 103*

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103<sup>©</sup> and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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17. Claims 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mattos et al., [hereafter Mattos], US Patent No. 5765147 as applied to Claim 44 above, and further in view of Davis et al., [hereafter Davis], US Patent No. 5918229.

18. As to Claims 47 Mattos does not teaches a system which including 'data and an address of said data within said second server', however, Mattos teaches index contains list of entries in the table used for searching, also index UDF or index user defined function, [see col 4, line 46-61, see col 12, line 65-67, col 13, line 1-15]. Davis teaches a system which including 'an identifier of an individual second server having retrieved said data and an address' [fig 4, col 9, line 10-19, col 18, line 18-24, fig 8-9, col 23, line 22-31, col 24, line 62-67, col 25, line 1-12].

It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the concepts taught by Davis with the system of Mattos because identifying individual servers or nodes and retrieving data in a structured data storage having globally addressable memory allows updating of other records [ see Davis, col 2, line 50-53, col 4, line 22-25, 39-46] in the same block of Mattos, allowing greater concurrence, bringing the advantages of quicker response in a shared memory and improving the reliability and versatility of the system.

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19. As to Claim 48, Davis details a system which including 'dictionary information of locations of said partial data items' [col 10, line 27-33], 'data comprises offset values representing locations of said partial data items relative to a starting address' [col 10, line 66-67, col 11, line 1-15, col 14, line 19-20], 'partial data items being clustered within said data' [col 30, line 55-61].



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***.Conclusion***

**The prior art made of record**

- a. US Patent No. 5765147
- b. US Patent No. 5918229

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- c. US Patent No. 5878409
- d. US Patent No. 5999924
- e. US Patent No. 5729730
- f. US Patent No. 5940289
- g. US Patent No. 5930800
- h. Lai F. Et al., A new general purpose parallel database system, IEEE 1997
- i. Welch, L.R. A parallel virtual machine for programs composed of  
Abstract data types, IEEE , 1994.

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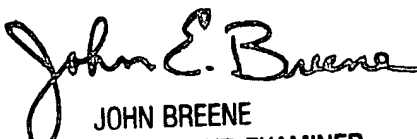
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is (703)308-8538. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703)305-9790. The fax phone number for this Art Unit is (703)308-6606.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)305-9600.

CS

June 13, 2000

  
JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700